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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/043,406	03/18/1998	PAUL D O'BRIEN	36-1148	6681

23117 7590 09/30/2003

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EXAMINER

ROBINSON BOYCE, AKIBA K

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 09/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/043,406

Applicant(s)

O'BRIEN, ET AL

Examiner

Akiba K Robinson-Boyce

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44-48 and 50-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 44-48 and 50-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Due to communications filed 7/11/03, the following is a final office action. Claims 44-48 and 50-60 are pending in this application and have been examined on the merits. Claims 44-48 and 50-60 are rejected. The previous rejection has been maintained.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 45-48, 50, 53-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wrabetz et al (US 5,442,791), and further in view of Parad (US 5,369,570).

As per claims 45-47, 53, 54, 55, Wrabetz et al discloses:

receiving a service request/an input connected to a distributed processing environment for receiving a service request...(Col. 7, lines 50-54, sending the resource request for remote execution services);

identifying component processes for use in provisioning the requested service, (Col. 14, lines 37-42, w/ Col. 29, line 58-Col. 30, line 3, represented by the resource instance, where the resource instance is associated with procedures);

establishing conditions applicable to provision of those component processes,
(Col. 14, lines 51-53, represented by constraining expressions);

providing a response to the service request, said response comprising an
indication of availability of the requested service/service request processing
means.../an output for providing a response...(Col. 7, lines 55-58, performing a remote
service in response to a remote request);

Wrabetz et al fails to disclose the following, however Parad discloses:

accessing an up-datable data store and storing said conditions when
established/an updatable data store...(Col. 29, lines 56-61, Col. 10, line 5 w/ Col. 26,
lines 36-42, Fig. 14 [shows rules part of database], where user established rules in
database through use of a menu));

wherein a service request is processed by accessing one or more of the
previously established conditions in the data store, processing the request using one or
more established conditions, and producing said response/wherein the processing
means is adapted to process a service request by accessing one or more of the
previously established conditions...(Col. 26, lines 37-41, where rules are retrieved from
the database in order to determine appropriate calendars);

negotiation means for use in establishing conditions...(Col. 29, lines 56-61,
where the negotiation occurs between the user and the intelligence of the action control
via logic).

wherein one or more of said established conditions has an associated expiry time
of the one or more conditions itself for storage in the data store, (Col. 16, line 48-51,
lines 53-54, represented by the after interval);

an expired or unidentified condition is detected in the data store, which condition
is applicable to a component process for the provision of a requested service, and a

substitute condition is established/ wherein said processing means is adapted to detect an expired or unidentified condition in the data store, which condition is applicable to a component process for the provision of a requested service to establish a substitute condition ... (Col. 28, lines 38-51 w/ Col. 29, lines 41-61, where if there is a rule violation, the user sends a message to the user's action control where the user can use the action control to establish another rule with the use of a menu).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Wrabetz et al and Parad since each reference discloses the management of resources and also with the motivation of showing how updating conditions or rules can be utilized in a resource management environment.

As per claim 48, Wrabetz et al discloses:

initiating one or more of said component processes identified for use in the requested service, (Abstract, lines 28-30, represented by forking remote execution control processes).

As per claim 50, Wrabetz, et al discloses:

programmed computer means for negotiating with another entity, in response to a request from said other entity, to provide a service, (Col. 7, lines 55-58, Col. 10, lines 49-53, represented by the computer processor);

means for accessing one or more resources available for use by the system to provide a service, (Col. 9, lines 36-41, represented by access to all of the resources in the network);

means to update said data about said system on the basis of the past performance of the system, (Col. 26, lines 39-42, where the past performance data is represented by a previously created or requested resource).

Wrabetz et al fails to disclose negotiation means or the negotiating means including a data store, however Parad discloses these features in the following passages: (Col. 29, lines 49-54, where the user and the intelligence of the action control utilize logic to negotiate and the data store is represented by the tables of the database).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention for the negotiation means to have a data store with the motivation of storing requested resource data for reference purposes. Data stores are traditionally used to store information for later referral. When negotiating, negotiators need a place to reference back to when negotiation terms are constantly changing.

As per claim 56, Wrabetz, et al discloses:

means to access said data store for storing data related to services offered by the system and to one or more entities which have an interest in receiving information relating to one or more of said services, together with means to transmit information based on said data related to services to the one or more entities which have an interest, (Col. 20, lines 53-56, where the makefile represents the data store since it specifies resource selection criteria).

As per claim 57, Wrabetz, et al discloses:

which further comprises initiation means to initiate one or more component processes in provision of a requested service, (Abstract, lines 26-31, where the initiation of component processes is represented by the initiation of the remote request which in turn initiates a remote execution control process).

As per claim 58, Wrabetz, et al discloses:

provisioning a requested service requires provision of a selected set of component processes, (Abstract, lines 36-41, where selected set is represented by a separate process for each remote request);

Wrabetz et al fails to disclose the following, however Parad discloses :

the negotiation means establishes and stores a set of conditions applicable to provision of the component processes of the selected set, (Col. 29, lines 56-61, where negotiation takes place between the user and the intelligence of the action control via logic and the conditions are represented by rules);

the processing means is adapted to process a service request by accessing the stored set of conditions in the data store, processing the request using said stored set, and producing said response, (Col. 26, lines 37-41, where the rule [condition] is retrieved from the database and processed by determining the calendar).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to negotiate, establish and store a set of conditions with the motivation of processing a resource request in which all parties can agree on and additionally for reference purposes. Data stores are traditionally used to store information for later referral. When negotiating, negotiators need a place to reference back to when negotiation terms are constantly changing.

As per claim 59, Wrabetz, et al discloses:

using a programmed computer to negotiate with another entity, in response to a request for said other entity, to provide a service, (Col. 10, lines 48-53, represented by external access to other networks);

accessing one or more resources available for use by the system to provide a service, (Col. 9, lines 36-41, represented by access to all of the resources in the network);

updating said data on the basis of the past performance, (Col. 26, lines 39-42, where past performance is represented by a previously created or requested resource instance).

Wrabetz fails to disclose the following, however Parad discloses:

said negotiating means including use of a data store containing data relating to a measure of the current capacity to provide a service, and being arrange to negotiate based at least in part on said data to provide a service in response to a request, (Col. 29, lines 56-61, where negotiation takes place between the user and the intelligence of the action control via logic and the conditions are represented by rules);

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to utilize a data store for negotiation so both parties can have referral means for previously discussed conditions. Data stores are traditionally used to store information for later referral. When negotiating, negotiators need a place to reference back to when negotiation terms are constantly changing.

As per claim 60, Wrabetz, et al discloses:

receiving a service request from an entity in a distributed processing environment, (Col. 16, lines 22-24, represented by the user program executing on a workstation for requesting information);

processing a service request and providing a response thereto and, based at least in part on data held in the data store, determining whether to provide a service, to propose conditions under which the system is willing to provide a service or to decline to

provide a service, (Col. 7, lines 55-63, Col. 14, lines 49-54, represented by the remote service routine performing the service in response to the user request);

wherein said plural instances are connected by a communications network, wherein at least one of said instances is arranged to provide more than one instance of a service, or of a negotiation for a service, to one or more requesting systems concurrently, (Col. 7, lines 54-67, Col. 10, lines 40-53, represented by the homogeneous and heterogeneous computer network environment);

wherein each of said method instances is associated with a plurality of organizations, each of said instances having processing and accessing stored parameters in an up-datable data store in respect of each of its associated plurality of organizations so as to provide a virtual organization, (Fig. 10, represented by different workgroups).

Wrabetz et al fails to disclose the following, however Parad discloses;

accessing an up-datable data store...(Col. 29, lines 56-61, Col. 10, line 5 w/ Col. 26, lines 36-42, Fig. 14 [shows rules part of database], where user established rules in database through use of a menu)).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to access an updatable data store with the motivation of having referral means for changing conditions and rules for resource requests when required. Data stores are traditionally used to store information for later referral. When negotiating, negotiators need a place to reference back to when negotiation terms are constantly changing.

4. Claims 44 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wrabetz et al (US 5,442,791), and further in view of Babeyev (US 5,615,121).

As per claims 44 and 52, Wrabetz et al fails to disclose the following, however Babeyev discloses:

Wherein the virtual organization exists for a predetermined period, (Col. 16, lines 1-2).

It would have been obvious at the time of the applicant's invention for the virtual organization to exist for a predetermined period with the motivation of making sure that service requests are fulfilled in a reasonable amount of time. In resource allocation, it is traditional to put time constraints on allocating resources so workflow will run smoothly.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claim 51 is rejected under 35 U.S.C. 102(e) as being anticipated by Wrabetz, et al (5442,791).

As per claims 51, Wrabetz, et al discloses:

an input connected to a distributed processing environment for receiving a service request...(Col. 16, lines 22-24, where input is represented by the user program executing on a workstation to request information);

a response output...(Col. 7, lines 55-63, Col 8, lines 1-7, [execution interface], Col. 16, lines 58-60);

processing means...(Col. 7, lines 55-63, Col. 14, lines 49-54, Col. 16, lines 26-33, represented by the computer processors);

means to access the data store...(Col. 12, line 50-Col. 13, line 10, where the means are represented by the interface 41 and the data store is represented by the RIB database);

wherein said plural systems are connected by a communications network...(Fig. 3, Col. 11, line 45-Col. 12, line 9, esp. Col. 11, lines 60-63, where the plural systems are represented by the agents and the communications network is represented by the heterogeneous computer network environment);

wherein each of said systems is associated with a plurality of organizations...(Fig. 10, where the organizations are represented by different workgroups).

Response to Arguments

7. Applicant's arguments with respect to the objection of claim 44 has been considered. As a result, the objection to this claim has been withdrawn.

8. Applicant's arguments filed 7/11/03 have been fully considered but they are not persuasive.

As per claim 45, the applicant argues that the combination of Wrabetz and Parad fails to teach "identifying component processes for use in provisioning the requested service" and "establishing conditions applicable to provision of those component processes". However, Wrabetz discloses these features in Col. 14, lines 51-53 where Wrabetz discloses that the resource query includes the type of the desired resource, which represents "identifying component processes for use in provisioning the requested service". Wrabetz also discloses that for each resource request, a separately forked remote control process is forked in Col. 13, lines 47-52. Therefore, the control process associated with the resource is identified upon receiving the resource request. In this passage, Wrabetz also discloses a constraining expression used to filter out resources based upon their current property values, which represents "establishing conditions applicable to provision of those component processes". The applicant argues that this constraining expression in Wrabetz help carry out a request unconditionally. However, the filtering of the constraining expression filters out certain resources based on the condition of their current property values. After certain resources are filtered out, these resources are then used to carry out the request. Therefore, the act of carrying out a request in Wrabetz is conditional.

The applicant also argues that Parad fails to remedy the deficiencies of Wrabetz and that Parad has two distinct components labeled "Action Control" and "Resource Engines". The applicant claims that the office action intermixes both of these

components, which, according to applicant makes no sense. However, it is shown in Parad that these components do intertwine and work together to help process the request in Col. 28, lines 30-37. In this passage, Parad discloses that the action control sends a message to one or more resource engines to alter the destination of order release messages.

In addition, the applicant argues that one of ordinary skill in the art would not have been motivated to combine the teaching of Parad and Wrabetz. However, both references disclose systems and methods for managing resources where resources are processed according to specific requirements or conditions. Therefore, the combination of Parad and Wrabetz is valid.

As per claims 45 and 48, the applicant also argues that Fig. 5b discussed in Col. 14, lines 37-42 of Wrabetz fails to disclose “identifying component processes for use in provisioning the requested service”. However, this passage discloses the definition of each resource instance in the network. Wrabetz also discloses that for each resource request, a separately forked remote control process is forked in Col. 13, lines 47-52. Therefore, the control process associated with the resource is identified upon receiving the resource request.

As per claim 46, the applicant argues that the combination of Wrabetz and Parad fails to teach “identifying component processes for use in provisioning the requested service” and “establishing conditions applicable to provision of those component processes”. However, the combination of Wrabetz and Parad disclose these features as discussed above with respect to claim 45.

The applicant also argues that Parad does not teach the requirement of one or more of the established conditions having an associated expiry time of the one or more conditions itself for storage in a data store. However, in Col. 16, lines 48-51 and 53-54 of Parad, the "after interval" is disclosed. This "after interval" represents the expiry time since it determines when late notices will be issued. Since late notices are to be issued after expiry time, then one can conclude that the time during the after interval is expired time. In addition, in Col. 28, lines 38-51 of Parad, it is again disclosed that late notices are provided as messages that describes a problem. This passage also discloses that messages that describe problems change the overall condition of a resources schedule.

As per claim 50, the applicant argues that Wrabetz fails to disclose "programmed computer means for negotiating with another entity, in response to a request from said other entity, to provide a service", or that the request is performed unconditionally. However, Wrabetz discloses this limitation in Col. 7, lines 55-58 and Col. 10, lines 49-53 where it is disclosed that upon receipt of the request, the processor performs the remote service as a separate remote execution control process for each resource request. The negotiation is represented by "analyzes the resource information database" of Col. 7, lines 36-43. Here, this analyzing is performed upon receipt of the resource query or remote request and is done in order to satisfy the resource request. In addition, in Col. 14, lines 51-53, Wrabetz discloses a constraining expression used to filter out resources based upon their current property values. However, the filtering of the constraining expression filters out certain resources based on the condition of their current property

values. After certain resources are filtered out, these resources are then used to carry out the request. Therefore, the act of carrying out a request in Wrabetz is conditional.

In addition, the applicant argues that Parad does not disclose negotiation means or that the negotiation means includes a data store or that there is no teaching that Parad's system can respond to the Enterprise Information Systems, which feed requirements into it. However, in Col. 29, lines 49-54 of Parad, the Action Control negotiates with the Resource Engine. Here, the requirements are fed into the Resource Engines component where a schedule that meets requirements is attempted to be created. This attempt represents the negotiation process since the Resource Engine tries to meet specific requirements requested by the requester by matching different resources with each request.

As per claims 53 and 54-58, the applicant argues that Wrabetz and Parad fail to disclose "negotiation means for use in establishing conditions applicable to provision of those component processes". However, as described above with respect to claim 50, the negotiation means are disclosed in Col. 29, lines 49-54 of Parad.

As per claim 59, the applicant argues that neither Wrabetz nor Parad disclose "using a programmed computer to negotiate with another entity, in response to a request from said other entity, to provide a service". However, this feature is described as discussed with respect to claim 50, in Col. 29, lines 49-54 of Parad where the Action Control negotiates with the Resource Engine.

As per claims 60 and 44, the applicant argues that prior art fails to disclose "determining whether to provide a service or to decline to provide a service" or

instances of a method running on a single processor. However, Col. 7, lines 55-Col. 8, line 6 of Wrabetz et al describes the process where once the request is received, a separate echo control process communicates with the remote execution interface that has sent the resource request in order to redirect any input [request]. If the request is redirected, the service would not be provided by that processor. In addition, a method of running on a single processor is common and typical in a processing environment. The fact that Parad uses separately forked remote execution control process on each of the computer processors allows the remote service routine to respond to and initiate control directives which is advantageous to the system.

The applicant also argues that there is no teaching in Wrabetz that each instance of a method might have its own data associated with it and according to the applicant fails to disclose "each of said instances having processing and assessing stored parameters in an up-dateable data store in respect of each of its associated plurality of organizations so as to provide a virtual organization". However, the abstract of Wrabetz et al in lines 28-30 discloses that each remote request forks a separate remote execution control process, therefore each method for the remote request is different and obviously has its own data associated with it.

As per claim 51, the applicant argues that Wrabetz et al fails to disclose "processing means...adapted to decide, based at least in part on data held in an updatable data store, whether to provide a service, to propose conditions under which the system is willing to provide a service or to decline to provide a service". However, this feature is disclosed in Wrabetz et al . First, Wrabetz et al discloses processing

means for processing a resource request in Col. 7, lines 55-63. Then, Col. 8, lines 1- 6 of Wrabetz et al describes the process where once the request is received, a separate echo control process communicates with the remote execution interface that has sent the resource request in order to redirect any input [request]. If the request is redirected, the service would not be provided by that processor.

As per claim 52, this claim depends from claim 51 and is therefore rejected for the same reasons as given above for claim 51.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akiba K Robinson-Boyce whose telephone number is

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703-305-1340. The examiner can normally be reached on Monday-Friday, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 703-305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7238 [After final communications, labeled "Box AF"], 703-746-7239 [Official Communications], and 703-746-7150 [Informal/Draft Communications, labeled "PROPOSED" or "DRAFT"].

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

QUB

A. R. B.
September 24, 2003

Susanna Ditz
Susanna Ditz
Primary Examiner
A.U. 3623